

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

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FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20554

<b>In the Matter of</b>	)	
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<b>Communications Assistance</b>	)	<b>CC Dkt. No. 97-213</b>
<b>for Law Enforcement Act</b>	)	
	)	

**Ameritech's Comments  
on the  
Further Notice of Proposed Rulemaking  
to establish  
Technical Requirements and Standards for CALEA**

**A. Introduction.**

On November 5, 1998, the Federal Communications Commission (FCC) released a Further Notice of Proposed Rulemaking in the Matter of Communications Assistance for Law Enforcement Act, CC Docket No. 97-213 (NPRM). In this proceeding, the FCC is seeking comments on the technical requirements necessary to comply with the Communications Assistance for Law Enforcement Act (CALEA) adopted into law in 1994. 47 U.S.C. section 1001 – 1010. Specifically, the FCC is seeking comments in general about the definition of call identifying information that is 'reasonably available,' as well as comments about specific technical requirements that the Federal Bureau of Investigation through the Department of Justice (FBI/DOJ) has argued are included in the scope of CALEA though they have not been included the industry's interim Standard J-STD-025 (Interim Standard).

Ameritech Corporation, on behalf of the Ameritech Operating Companies and Ameritech Mobile Communications, Inc., (Ameritech) submit these comments. Having

been a significant participant in the standard's process, Ameritech supports the interim Standard J-STD-025 as meeting the capability requirements of Section 103 of CALEA. Ameritech disagrees that the FBI/DOJ's Petition cited any deficiencies in the Interim Standard. Rather, Ameritech believes that the technical capabilities requested by the FBI/DOJ Petition go beyond the capability requirements in CALEA, and specifically that several of the technical information requested by the FBI/DOJ do not meet the definitions of call identifying information, primarily because that information is not reasonably available.

Finally, Ameritech supports the comments being filed concurrently by the United States Telephone Association (USTA), in particular the discussion and position set forth in USTA's comments on packet mode telecommunications.

**B. General Comments.**

The FCC requests comments in general regarding the definition of call identifying information taking into account that the CALEA statute clearly states that carriers are only responsible for ensuring access to call identifying information that is reasonably available. The FCC has just started to address the issues that the industry has been struggling to answer for the last several years.

Ameritech always has taken the position in CALEA that it is ready and willing to comply with the law. However, Ameritech merely wants to implement the technical requirements and provide law enforcement with the necessary information. Ameritech does not want to be over-involved with processing information or being responsible for determining what is call content and what is call identifying information, thereby being

forced on a on a case-by-case basis being forced to decide whether law enforcement has the authority to obtain the requested information.

Call identifying information that is reasonably available means that the information is generated within the switch or switching systems, and is either already produced in a readable format or can easily be obtained or produced by the switch. The concept of 'easily obtained or produced' means that the manufacturers can use hardware or software to produce the information, but the process of writing software and/or building in additional hardware does not result in significant or substantial costs, or a substantial or fundamental change in the telecommunications architecture. Thus, in order to determine if certain information is call identifying information, even if it falls within the technical definition, the FCC must balance the technical requirements and expense of producing such information, before finding that telecommunications carriers must provide that information to law enforcement pursuant to a pen register or Title III authorization.

In terms of cost, Ameritech believes that the FCC should find that if the expense of developing a specific technical functionality is greater than 5% of the total cost of providing the standard functionality, then the functionality (or punch list item) is not reasonably available. In this regard, given the nine punch list items, if the FCC determines that each item meets the definition of call identifying information and each item is approximately equal to 5% of the total cost of providing the Interim Standard, then the FCC has just increased the cost of CALEA compliance by 45%.

As is noted in several comments, the costs of CALEA compliance will be significant, even without including the punch list items. Ameritech's estimated expenses – independent of any right to use fees from the manufacturers – are \$69 million dollars<sup>1</sup> for both its wireline and wireless systems. And, the right to use fees may easily double that figure. Given that the CALEA statute only provides reimbursement for all carriers at an amount equal to \$500 million and the estimated costs for all carriers will be much greater than this amount, carriers will have to recover its costs from ratepayers.

Consequently, the FCC needs to establish a cost recovery mechanism to ensure that the costs of this program – mandated by government action – are fully recovered. Ameritech will make a filing for cost recovery at such time as these costs and the recovery mechanism are better defined.

The FCC should also ensure that telecommunications carriers are not inextricably intertwined with processing information or extracting data. The wiretap statutes limit telecommunications carriers involvement to technical assistance, and that role should not be expanded.<sup>2</sup> For example, telecommunications carriers should not be responsible for such things as data extraction; they should be able to implement the wiretap either as a pen register or a Title III and merely provide the “technical assistance” that is required under the law.

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<sup>1</sup> The estimated \$69 million dollars assumes a reasonable lead time between the availability of the software and implementation and does not include any special installation costs that would be incurred if there is a rush to have everything compatible by June, 2000. In addition, it also assumes a reasonable interpretation and implementation of the capacity requirement. If the FBI/DOJ was successful in its position on capacity, Ameritech's estimated expenses would increase from \$14 million to \$128 million.

<sup>2</sup> See 18 U.S.C. section 2511(2)(a)(ii).

Finally, the FCC must not create additional complexity in an already complex process. For example, the FCC has found that location information is call identifying information, but the FCC implies that law enforcement cannot obtain location information pursuant to a pen register court order. The only other category of authorization which law enforcement can use to obtain such information is Title III which provides law enforcement with full content. Thus, the FCC has established a situation in which there is call identifying information which is provided pursuant to a pen register, and call identifying information provided pursuant to a Title III authorization. While the FCC may be correct in its conclusions, the FCC is now obligated to establish which call identifying information must be provided under a pen register and which call identifying information must be provided under a Title III. As an independent agency, the CALEA statute clearly establishes the FCC as the entity to interpret the statute and provide guidance to the industry in the proper implementation of CALEA. See e.g., 47 U.S.C. section 229; 47 U.S.C. sections 1006, 1008. In fact, the FCC acknowledged the necessity of making these determinations by finding that a carrier may be liable for providing law enforcement information that it is not authorized to receive. See NPRM at paragraph 63.<sup>3</sup>

In addition, the FCC creates additional complexity every time a new functionality is identified as meeting the definition of call identifying information. The FCC has

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<sup>3</sup> However, the FCC seems intent on side-stepping this issue, especially with regard to in-band and out-of-band signaling. NPRM at paragraph 99. By defining its role as only needing to determine the technical requirements of Section 103, the FCC ignores its obligations not only to establish the assistance capability requirements by cost effective means, but also to "protect the privacy and security of communications not authorized to be intercepted...." 47 U.S.C. section 1006(b)(1) and (2).

requested comments on whether the introduction of these technical requirements will impair the ability to introduce new products and services. Since Ameritech is not the manufacturer of any of the switches including these CALEA features, Ameritech cannot comment on any particular features or functionality that this capability will impact. However, the FCC should be aware that with each additional feature and functionality, there is additional complexity which raises the likelihood that manufacturers will run into roadblocks in developing and implementing new services or technologies.

With those overall concepts in mind, Ameritech will now address the specific technical requirements identified in the FCC.

C. Contents of Subject Initiated Call Conference.

Ameritech does not support the FCC's tentative conclusion that conversations between the subscriber/target's services and other participants is content information available to law enforcement pursuant to a Title III court order. At the outset, the FCC cannot include conference bridging services within the definition of this functionality, as proposed by the FBI/DOJ. First, these services are not "equipment, facilities or services of a subscriber" as required in Section 103(a). 47 U.S.C. Section 1002(a) (emphasis added). Second, it is impossible to intercept a conference call performed on a conference bridging system that is unconnected and unrelated to the provision of services to the subscriber. Thus, carriers would have no knowledge of when the conference call would occur and which telecommunications provider the callers would use to establish the conference call. However, to the extent that the FCC adopts its tentative conclusion, the FCC must maintain the limitations set forth in its NPRM; specifically, that such an

interception is limited to conference calls supported by the subscriber/target's services (i.e., no conference bridging services), and such an interception would cease when the subscriber/target drops off the call and the call is disconnected or rerouted.

D. Party Hold, Join, Drop On Conference Calls.

Ameritech does not support the FCC's tentative conclusion that party hold is call identifying information which should be provided to law enforcement, if reasonably available. The current Interim Standard already addresses the issue of party join and party drop. However, to the extent that the FCC adopts its tentative conclusion, the FCC must maintain the limitations set forth in its NPRM; specifically, that party hold, join, and drop is provided only when the network signaling information is generated. Finally, Ameritech would support a finding that it is reasonably available only if it meets the costs standard proposed herein, i.e., that this function would cost no more than 5% of the total amount for the J-STD-025 Standard.

E. Subject Initiated Dialing and Signaling Information.

Ameritech does not support the FCC's tentative conclusion that subject-initiated dialing and signaling information is call identifying information which should be provided to law enforcement, if reasonably available. However, to the extent that the FCC adopts its tentative conclusion, the FCC must maintain the limitations set forth in its NPRM; specifically, that this requirement applies only to the extent that a network signal is generated when the services are accessed or activated by the subscriber/target. Moreover, Ameritech would support the finding that this information is reasonably available only if it meets the costs standard proposed herein.

F. In-band and Out-of-band Signaling.

Ameritech does not support the inclusion of this functionality within the definition of call identifying information under the CALEA statute. In particular, the current Interim Standard already provides the origin, direction, destination, or termination of communications generated or received by the subscriber/target. The FBI is seeking more than that with this functionality. For example, the FBI seeks information on the status of a non-completed call, i.e., whether the called line was busy or merely rang with no answer. In addition, Ameritech disagrees with the FCC's conclusion that a message that there is a voice mail message waiting for the subscriber is call identifying information. That type of message is associated with the provision of an information service, which the FCC specifically acknowledges is not a part of the CALEA statute. NPRM at paragraph 63.

Ameritech also disagrees that the FCC can side step the difficult aspects of this issue, i.e., what is call content and what is call identifying information. The FCC cannot simply state that, since carriers must provide both types of information, the FCC need not address which category the information is provided under. NPRM at paragraph 99. The FCC has the specific obligation of determining what is call identifying information and what is call content information. The CALEA statute itself establishes different criteria for determining whether call identifying information must be provided, i.e., only if it is reasonably available. This same limitation is not put on call content information. Therefore, in order to determine whether the information meets the definition of call identifying information and must be provided, the FCC must do a complete analysis



about whether the information is reasonably available. By putting everything into the same category without the mandated analysis, the FCC cannot meet its obligations under CALEA.

Until such time as there is additional information as to what information is to be provided via in-band or out-of-band signaling, the industry is not in a position to determine specifically what the costs of developing this function would be. Nevertheless, assuming that the FCC will find that some of the signaling information is call identifying information, at a minimum the industry knows that developing the ability to capture and deliver that information to law enforcement will require invention, design and integration of miscellaneous tone detectors into the current network design together with corresponding detector hardware. Thus, given the complexity of the technical functionality, it can be assumed developing the functionality will generate substantial costs.

However, one method of limiting potential expenses would be to avoid the need for architecture development and integration of tone detectors, by allowing the signaling information to be transmitted over the Call Content Channel (CCC) and not the Call Data Channel (CDC). In addition, requiring only signaling information that is generated by the subscriber/target's switch or easily available through SS7 signaling would further decrease expenses.

That is not to say however, that providing signaling information over a CCC would be inexpensive. First, there are the costs of developing the capability to gather the information within the switch or SS7 system and transporting it over the CCC. Second, each wiretap would require the provision of two channels, both the CDC and CCC, if the

law enforcement agency conducting the wiretap believes that it needs the signaling information. Thus, it would double the capacity channels required for each wiretap.<sup>4</sup>

G. Timing Information.

Ameritech does not support the FCC's tentative conclusion that timing information is a requirement of CALEA, because it does not meet the definition of call identifying information. Nevertheless, the current Interim Standard J-STD-025 will meet this FCC's timing requirement because it stipulates that call identifying information will be provided to law enforcement as soon as it is generated, except when the CDC becomes congested due to insufficient subscription of channels by the FBI/DOJ.

H. Feature Status, Continuity Check and Surveillance Status.

Ameritech supports the FCC's tentative conclusion that the Feature Status Message, Continuity Check, and Surveillance Status are not capability requirements of CALEA.

I. Dialed Digit Extraction.

Ameritech does not support the FCC's tentative conclusion that dialed digit extraction is within the scope of CALEA, based upon the FBI/DOJ's position that 'post call cut-through touch tone generated' call-identifying information must be delivered on a CDC and cannot be delivered over a separate CCC. The FBI requests that digits used to route a call that are dialed after the call is cut-through by the local central office switch – such as those dialed to complete a call after the subject is connected to a long-distance

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<sup>4</sup> This comment should not be read as an endorsement for the FBI/DOJ's proposed capacity numbers. Even with the two channels, CDC and CCC, Ameritech believes that the proposed capacity numbers by the FBI/DOJ are significantly overstated.

carrier – be delivered to them over a CDC channel. Post cut-through dialed digit extraction is not reasonably available to the carrier as is required by CALEA. First, touch tone detectors are designed only to read touch tones prior to call cut-through and are designed for only short holding time use, i.e., measured in seconds. Touch tone detectors are not made for full call length use measured in minutes or hours. Second, it is impossible for carriers to distinguish between those post cut-through digits that are used by another network or by CPE to route calls, and those post cut-through digits used to perform other functions, such as credit card numbers or social security numbers, used when subscribers access database information of bank accounts, pensions accounts, or brokerage accounts.<sup>5</sup> Thus, the only feasible method of making this information available by the local switch is to deliver all post cut-through digits to law enforcement.

If the FCC concludes that CALEA requires this type of functionality, the FCC at a minimum must find that carriers are not obligated to scrub and interpret all post cut through digits in order to put certain digits over the CDC. CALEA does not establish the obligation on carriers to scrub the information prior to providing it to law enforcement, i.e., to make judgements as to whether the information is call identifying information or call content information. In fact, Ameritech is aware of no known method of differentiating between these digits dialed – a digit is a digit. Carriers should not be placed in the untenable position of potentially failing to provide law enforcement with necessary information.

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<sup>5</sup> See Ameritech's Comments filed on May 20, 1998 in the Matter of Communications Assistance for Law Enforcement, CC Dkt. No. 97-213.

Rather, Ameritech believes that the solution to this problem is to require law enforcement to minimize the interception of communications not related to the criminal investigation.<sup>6</sup> When establishing the ability of law enforcement to intercept communications, Congress knew that law enforcement would in many instances obtain information not relevant to the criminal investigation. Nevertheless, Congress allowed law enforcement to obtain the information in order to ensure the law enforcement would obtain the relevant information. To address this issue, Congress required law enforcement to minimize the use of that information.

If the FCC finds that dialed digit extraction is required under CALEA, any method the FCC would adopt will generate substantial expense. Obviously, if carriers are required to extract the information the cost to the residential ratepayer will be exorbitant. If carriers are only required to provide a one way CCC as provided for in the Interim Standard, and not send messages over the CDC, it will at least minimize the costs. Specifically, in the case of a pen register, law enforcement would order a one-way (from the subject) CCC and install the necessary equipment to extract DTMF digits. Clearly, this method would avoid the expense of developing the digit extraction feature, as well as keeping touch-tone registers tied to a monitored call for the entire duration of a call. However, a one-way CCC would still generate substantial costs because, as with the in-band and out-of-band signaling information, for every pen register, two channels would be required. Despite this very substantial capacity cost, it would still be less than

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<sup>6</sup> See e.g., 18 U.S.C. sec. 2518(5) and FBI/DOJ Petition for Federal Communications Commission to declare the Interim Standard J-STD-025 Deficient, at 29.

requiring a redesign of touch tone detector architectures to accommodate full call period connection and then adding the corresponding detector hardware.

J. Conclusion.

Based on the foregoing, the FCC should confirm that the Interim Standard meets the requirements of Section 103 capability under CALEA, and reject the FBI/DOJ's Petition consistent with the Comments provided herein.

Respectfully submitted,



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